MONDAY WEEK 8 _____ MATH PRACTICE

Name

1. In ten shows, a magician pulled rabbits from a hat. The numbers pulled in those ten shows were: **15, 4, 9, 16, 12, 9, 12, 16, 3, 11.**

   How many modes can be found in this set of data?

2. Solve: **$4n + 5 = 15$**

3. Use the *powers of a power property* to simplify the expression:

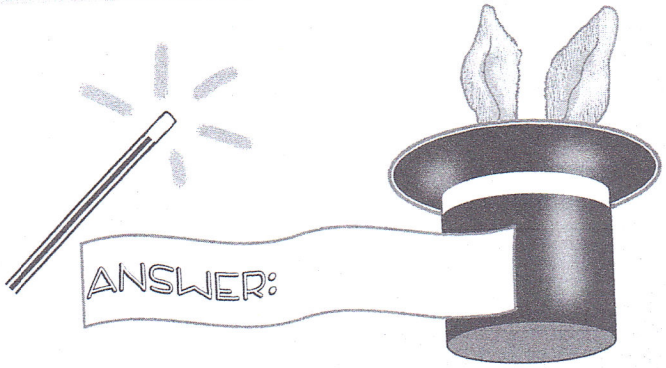
   $$(10^4)^2 =$$

4. One of Harry Houdini's famous tricks involved the disappearance of a large elephant. To find a number equal to the weight of that elephant (in pounds), give the value of the expression:

   $$-100^2$$

5. There are claims that David Copperfield is the world's highest-earning magician and illusionist. His 2005 proceeds from shows and endorsements totaled $57 million.

   If he earned $32 million from endorsements and $5 million per show, how many shows did he perform in 2005?



TUESDAY WEEK 8 _____ MATH PRACTICE

Name

1. A donor offered a dollar amount for each second that an escape artist could stay underwater in a large glass container. The amount totaled seventy-eight dollars after thirteen seconds. At this rate, how much would the donor pay for a full two minutes?

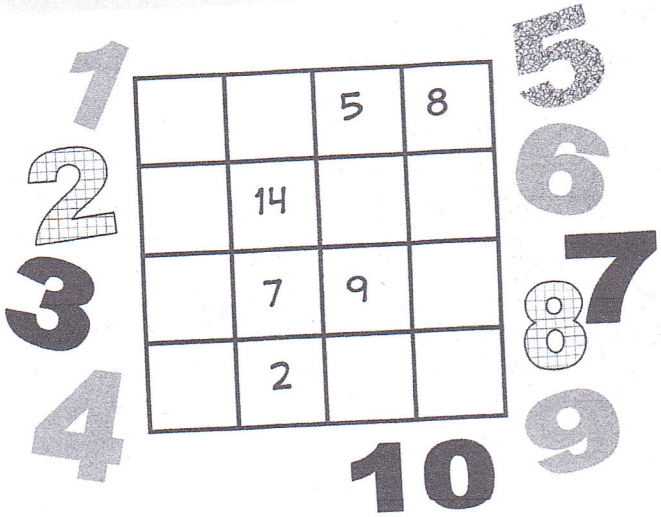
2. Solve: $\sqrt{x+2} = 5$

3. Use numbers and symbols to write the statement:

   The difference between two times a number and five squared is greater than twelve.

4. Solve: **$p - 12 = 3p + 4$**

5. Complete the magic square using the numbers 1 through 16, each one time. All rows (horizontal, vertical, and diagonal) add up to the sum of 34.



WEDNESDAY WEEK 8 _____ MATH PRACTICE

Name

1. Simplify the product:

$$(10x^4y)(3x^2y^4)$$

2.

FIND THE UNKNOWN NUMBERS

Three consecutive even integers add up to 42.

What are the integers?

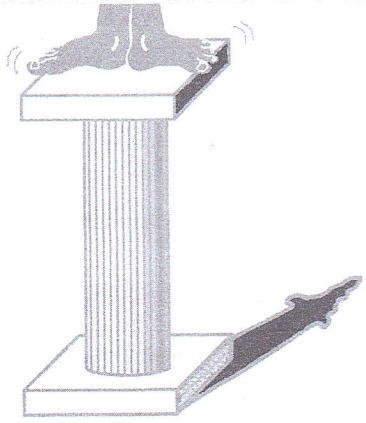
3. Simplify: $\frac{6ab^2}{-2ab}$

4. Is the equation solved correctly?

$$\frac{x}{2} - 4\frac{1}{3} = 2\frac{1}{4}$$

$$x = 4\frac{1}{6}$$

5. David Blaine, famous street magician, stood in a closet of ice in Times Square for 61 hours and 40 minutes. At another time, he stood on a pillar for a different length of time. The total time for the two feats is $6\frac{1}{2}$ hours less than 102 hours and 33 minutes. How long did David stand on the pillar?



THURSDAY WEEK 8 _____ MATH PRACTICE

Name

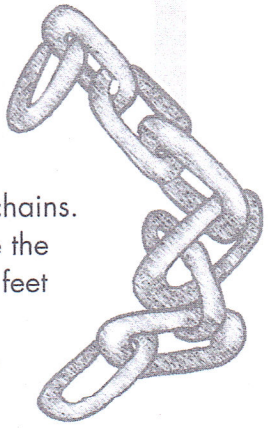
1. Simplify: $(2\sqrt{5})^2$

2. Evaluate for $n = -5$ and $p = -9$.

$$\frac{-n + 2p}{p - 4}$$

3. Solve: $\frac{x}{2} + 6 = \frac{2x}{5} + 7$

4. An escape artist is secured in a chest wrapped in chains. The chest hangs from a crane and is 16 feet above the waterline. Then it is lowered to the sea bottom, 68 feet below the surface. Write and solve a subtraction sentence to find the difference between the starting location and the resting spot of the chest.



5. Circle statements that are true.

$5^2 - 33 \geq 23$

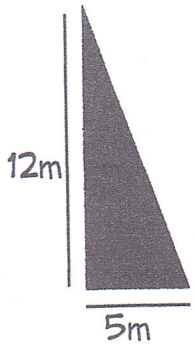
$(\sqrt{64})(\sqrt{121}) \neq \frac{440}{5}$

$4\sqrt[3]{125} > 3\sqrt[3]{64}$

$\frac{1}{5}x = \frac{3}{15}x$

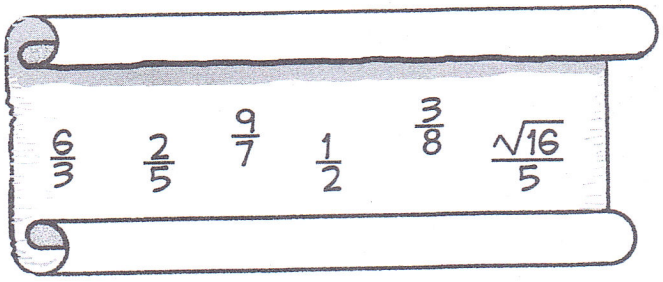
1. **5,320** is eighty percent of what number?

2. Use the Pythagorean theorem to find the length of the missing side.

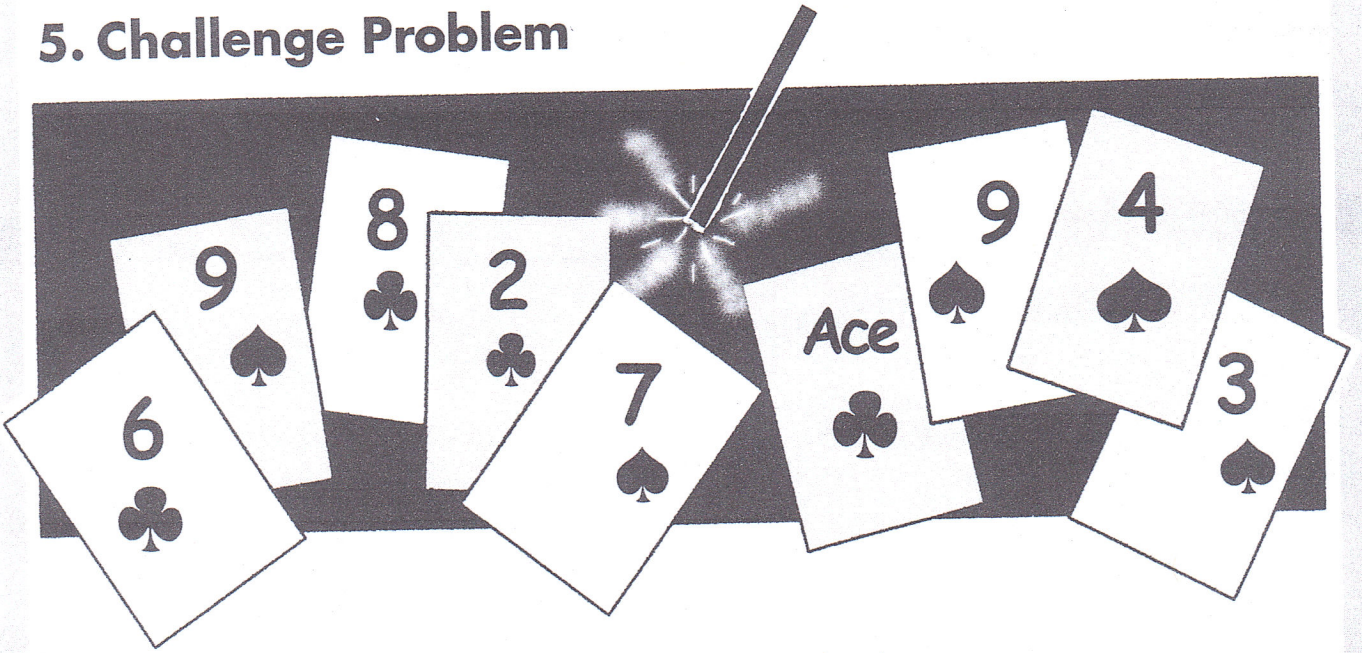


3. A magician found that her injuries increased after she started doing tricks with knives and fire. After doing 15 shows, she had a total of 735 cuts, nicks, bruises, and burns. At this rate, how many shows did she do to accumulate 294 such injuries?

4. Put these numbers in order from smallest to largest.



5. Challenge Problem



At a magic show, the magician holds these cards in his hands.
A member of the audience draws a card without looking.

a. What is the probability it will be a club?

b. What is the probability it will NOT be an even number or a club? *(Assume ace value = 1)*

c. What is the probability it will NOT be a number > 4? *(Assume ace value = 1)*

d. The participant draws two cards from this group of cards. What is the probability she will draw a 4 of spades followed by the ace of clubs?